

## Application hints for OSRAM *Touch DIM* function



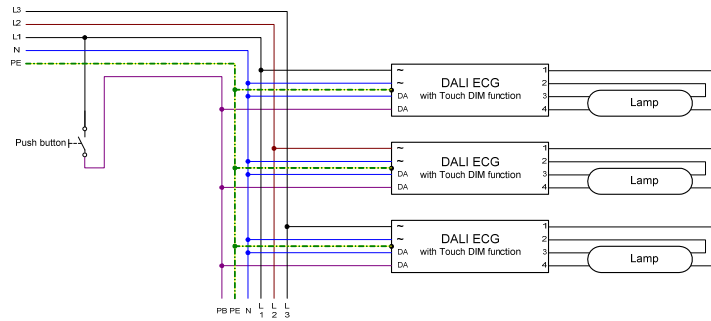
With **Touch Dim**, OSRAM DALI ECG can be used as convenient dimmers with a memory function by connection of a normal push button. **Touch Dim** is no part of the DALI standard but an additional function offered by OSRAM DALI control gears:

- Electronic Control Gear for fluorescent lamps: **QTi DALI ... DIM**
- Low voltage halogen transformer: **HTi DALI 150/220-240 DIM**
- LED dimmer: **OTi DALI DIM**

**Important !!!**

**DALI** and **Touch DIM** must never be used at the same time! In other words, control is achieved either with DALI controller or with the **Touch DIM** function.

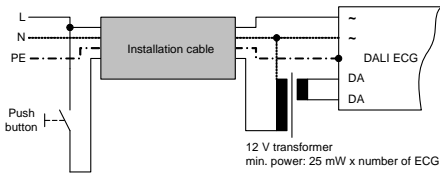
**Wiring instructions and compensation:**



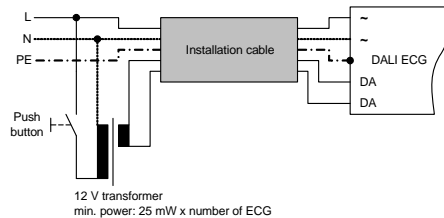
**Fig.:** Up to 4 ECGs can be controlled via Push Button Usage. The number of Push Buttons is limited by the sum of the overall cable length between switch(es) and the connected ECGs which may not exceed 25m.

Switches with glow lamp must not be used. For a cable length of more than 25 m, compensation must be provided for the line capacitance by connecting a transformer with the following features: primary side 230 V / secondary side 12 V, required power of transformer: 25 mW per connected ECG (e.g. 100 mW for 4 ECG, 250 mW for 10 ECG a.s.o.) .

either:



or:



**Option A:** Transformer located close to the ECG (e.g. inside the luminaire)

**Option B:** Transformer located close to the push button (e.g. inside a recessed flush-device box)

### Touch DIM operation

- Switching the lamp on/off: short press (< 0,5 s)
- Dimming: Long press (> 0,5 s), the dimming direction is changed with each press
- Store reference value: double-click (press twice within 0,4 s) while lamp is on → switch to mode 2 (see operating modes)
- Delete reference value: double-click while lamp status is "off" → switch to mode 1 (see operating modes)

**Note:**

Long press while lamp status off: the lamp is switched on at the minimum dimmer setting and faded up until the switch is released.

### Operating modes with Touch DIM

OSRAM QT*i* DALI ... DIM offer two operating modes for **Touch DIM**. They differ in terms of their switch-on behaviour.

Mode 1\*:

The switch-on value is always the last dimmer value before the lighting was switched off.

Mode 2: (default mode)

The switch-on value is the value stored by double clicking.

*\* Mode 1 is based on the Touch DIM function of the earlier QT DALI ... DIM series but is not 100 % compatible. After a break in the power supply the last switching state (on/off) and the last dimmer setting are restored for QT*i* DALI ... DIM (old series: 100 % light or off). The dimming rate of the QT*i* series is also a little slower, which enables the dimmer value to be set with greater precision. Therefore please do not mix QT DALi and QT*i* DALI ECG in luminaires controlled by the same switch.*

Switching between modes 1 and 2:

Mode 1 is activated by double-clicking while the lamp is switched off. You can switch to mode 2 by double-clicking while the lamp is switched on.

### Synchronisation of Touch DIM

If a large number of DALI ECG with **Touch DIM** is operated in a system there is a chance that an ECG will operate out of synchronism with the others (= different dimming level setting or different switching state).

Synchronism can be restored as follows:

1. Step: **Long** press of the switch (> 0,5 s) → all the lamps are switched on
2. Step: **Short** press of the switch (< 0,5 s) → all the lamps are switched off
3. Step: **Long** press of the switch (> 0,5 s) → all the lamps are switched on at minimum dimmer setting and fade up
4. Step: Double-click (2x within 0,4 s) → store value (OPTIONAL)

After these three steps – **long-short-long** – all the ECGs will be back in synchronism.

**Note:**

**Touch DIM** is designed for manual control; it is not suitable for a connection to an automation.

### Filtering out mains disturbances

Serious mains disturbances (caused for example by electrical motors) may result in incorrect operation of the ECGs. This can be remedied by the **Touch DIM filter** module (available on request), which is connected between the mains and the DALI inputs of the ECGs.

### Behaviour after mains voltage interruptions

If the luminaire is disconnected from the power supply the ECG stores all the set values. If the light value was changed before the luminaire was switched off (override dimming) this override value is restored. In other words, the last state is restored precisely after a break in the power supply.

The reference value that has been stored by double clicking is retained in the ECG even after a break in the power supply and can be called up again, if required.

If the luminaire was off when the break in the power supply occurred it remains off when power returns.

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